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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BRIAN THOMAS BOLAND and GOKUL RAJARAM

Appeal 2015-003572
Application 13/297,180
Technology Center 3600

Before MURRIEL CRAWFORD, BRADLEY B. BAYAT, and
AMEE A. SHAH, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final decision rejecting claims 1–22. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

BACKGROUND

Appellants' invention is directed to providing information items, including advertisements, to users of a social networking system (Spec. 1).

Claim 1 is illustrative:

1. A computer-implemented method comprising:
 - maintaining profile information about a subject user and profile information about a viewing user of a social networking system;
 - receiving, from the viewing user, a request for a profile page of the subject user;
 - determining advertising items to display to the viewing user, comprising:
 - determining an affinity of the viewing user for the subject user;
 - selecting at least one user profile from the subject user profile and the viewing user profile for determining a set of interests for consideration in conjunction with the advertising items, the selection based on the affinity of the viewing user for the subject user;
 - determining by a processor, the set of interests based on the selected at least one user profile;
 - determining a score for each of a plurality of advertising items based on a comparison of the advertising item with the determined set of interests;
 - selecting one or more advertising items from the plurality of advertising items based at least in part on the scores of the plurality of advertising items;
 - generating the profile page of the subject user based on the profile information about the subject user; and
 - inserting the selected one or more advertising items into the profile page of the subject user; and
 - sending the profile page including the one or more advertising items for display to the viewing user.

The Examiner relies on the following prior art reference as evidence of unpatentability:

Kendall	US 2009/0119167 A1	May 7, 2009
Zuckerberg	US 7,669,123 B2	Feb. 23, 2010
Novikov	US 2011/0153377 A1	June 23, 2011

Appellants appeal the following rejection(s):

Claims 1–22 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1–22 are rejected under 35 U.S.C. § 103(a) as unpatentable over Novikov, in view of Zuckerberg and Kendall.

ISSUES

Did the Examiner err in rejecting the claims under 35 U.S.C. § 101 because (1) the claims are not directed to an abstract idea, (2) the claims do not preempt all applications of an idea, (3) the claims recite a specific way of selecting advertisement, (4) the Examiner has failed to establish that the ideas recited are generally known and (5) because the claims arise specifically in the realm of computer networks?

Did the Examiner err in rejecting the claims under 35 U.S.C. § 103(a) because the prior art does not disclose the step of determining advertising items to display to a viewing user comprising selecting a subject user profile based on a determined affinity of the viewing user for the subject user?

ANALYSIS

Rejection under 35 U.S.C. § 101

The Examiner entered a new ground of rejection under 35 U.S.C. § 101 in the Answer.

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S.Ct. 2347, 2354 (2014).

In determining whether a claim falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S.Ct. 1289, 1296–97 (2012)). In accordance with that framework, we first determine whether the claim is “directed to” a patent-ineligible abstract idea. *See Alice*, 134 S.Ct. at 2356 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) (“Analyzing respondents’ claims according to the above statements from our cases, we think that a physical and chemical process for molding precision synthetic

rubber products falls within the § 101 categories of possibly patentable subject matter.”); *Parker v. Flook*, 437 U.S. 584, 594–95 (1978) (“Respondent’s application simply provides a new and presumably better method for calculating alarm limit values.”); *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) (“They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals.”).

The patent-ineligible end of the spectrum includes fundamental economic practices, *Alice*, 134 S.Ct. at 2357; *Bilski*, 561 U.S. at 611; mathematical formulas, *Flook*, 437 U.S. at 594–95; and basic tools of scientific and technological work, *Benson*, 409 U.S. at 69. On the patent-eligible side of the spectrum are physical and chemical processes, such as curing rubber, *Diamond*, 450 U.S. at 184 n.7, “tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores,” and a process for manufacturing flour, *Gottschalk*, 409 U.S. at 69.

If the claim is “directed to” a patent-ineligible abstract idea, we then consider the elements of the claim—both individually and as an ordered combination—to assess whether the additional elements transform the nature of the claim into a patent-eligible application of the abstract idea. *Alice*, 134 S.Ct. at 2355. This is a search for an “inventive concept”—an element or combination of elements sufficient to ensure that the claim amounts to “significantly more” than the abstract idea itself. *Id.*

The Examiner holds that independent claim 1 is directed to presenting targeted advertisements to a particular user based on tracked affinity data of the users and that this is an abstract idea (Ans. 3–4). The Examiner also holds that the process is merely the combined and coordinated execution of general computer functionalities. (Ans. 4–5). We agree.

In our view, independent method claim 1, based on its express limitations, is directed to a method for increasing the relevancy of ads to viewing users by targeting the advertisements based on the affinity data of users. Appellants' Specification discloses that targeting of advertisements raises the effectiveness of the ad (Spec. 1). The targeting of advertisements to specific potential customers is a fundamental economic practice used by advertisers for many years and thus is an abstract idea.

We are not persuaded of error on the part of the Examiner by the Appellants' argument (Reply Br. 4) that the claims would not preempt the user of this approach in all fields and would not effectively grant a monopoly over the abstract idea. While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility. *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362—63 (Fed. Cir. 2015), *cert. denied*, 136 S.Ct. 701, 193 (2015) (“[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract.”). And, “[w]here a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot.” *Ariosa*, 788 F.3d at 1379.

Turning to the second step of the *Alice* analysis, because we determine that independent claim 1 is directed to an abstract idea, the claim must include an “inventive concept” in order to be patent-eligible, i.e., there must be an element or combination of elements that is sufficient to ensure that the claim in practice amounts to significantly more than the abstract idea itself.

We are not persuaded of error on the part of the Examiner by Appellants' argument (Reply Br. 6) that the targeting of the advertisement is done by a mechanism that tracks affinity data and is thus significantly more than the abstract idea. Claim 1 does recite that the advertisement is targeted based on the interests of the subject user and the affinity of a viewing user to a subject. However, the targeting of ads based on the interests of the subject user and the affinity of the viewing user to the subject user is part of the abstract idea itself. In this regard, we do not agree that the mechanism arises specifically in the realm of computer networks. The steps instead relate to comparing data, i.e., between a subject profile and viewer profile and between the interests of a subject user and advertising items, which are conventional data analysis steps capable of performance on any general computer. In fact, Appellants' Specification at page 28 clearly states that the apparatus for performing the steps of the invention is a general-purpose computing device.

We are not persuaded of error on the part of the Examiner by Appellants' argument (Reply Br. 6–7) that the Examiner has not provided prior art or reasoning for why the ideas of the invention were generally known. Although the second step in the *Alice/Mayo* framework is termed a search for an “inventive concept,” the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for “an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Alice*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304.

We are not persuaded by Appellants' argument that the claim is analogous to that in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014), where the Court noted that a claim may amount to more than any abstract idea recited in the claims when it addresses and solves problems only encountered with computer technology and online transactions (Reply Br. 7).

In *DDR*, the court stated that "the [] patent's claims address the problem of retaining website visitors that, if adhering to the routine, conventional functioning of Internet hyperlink protocol, would be instantly transported away from a host's website after 'clicking' on an advertisement and activating a hyperlink." *DDR Holdings*, 773 F.3d at 1257. This was done in the claim by serving a composite page with content based on the link that was activated to serve the page.

In contrast, claim 1 performs a process that identifies which advertisements will be presented to a viewing user. Advertisement identification is not a technical problem, it is a marketing problem. Using comparisons between subject user and viewing user profiles and between subject user interests and advertisement items is a commercial solution, not a technical solution. This may be assisted using a general purpose computer to compare data regarding the profiles of the viewing and subject users and interests of the subject users and the viewing users, but does not arise specifically in the realm of computer networks.

In view of the foregoing, we will sustain this rejection of claim 1. We will also sustain this rejection as it is directed to the remaining claims because the Appellants have not argued the separate patent eligibility of these claims.

Rejection under 35 U.S.C. § 103(a)

Appellants argue that Zuckerberg does not disclose selecting at least one user profile from the subject user profiles based on the affinity of the viewing user for the subject user. We agree.

The Examiner relies on column 1, lines 35–57, column 7, lines 3–17, and column 10, lines 28–30 of Zuckerberg for teaching this subject matter.

We find that column 1, lines 35–58 of Zuckerberg discloses that users of a networking website may connect with other users by providing information such as contact information, background information, current job position, and hobbies that can be accessed by other users. Other users can make connections based on the user information or for any other reason. The social networking websites may also provide connections between various users based on information such as geographical locations, job type etc. Column 7, lines 3–17 recites that a user can request a news feed about a subject user. The news feed of the selected subject user utilizes data about the subject user to assemble a list of one or more items of media content for display to a viewing user. Column 10, lines 28–30 discloses that a filter may be applied that removes predetermined content which is not of interest to the viewing user. While these portions of Zuckerberg disclose finding affinities between a subject user and a viewing user and that content may be displayed to a viewing user based on subject user data, there is no disclosure that a subject user profile is selected based on an affinity with the viewing user. Rather, all that is disclosed in Zuckerberg is that the viewing user can request a subject user's news feed and that the selection of media content

shown is assembled from the subject user's news feed. There is no selection of a profile based on its affinity for another profile.

In view of the foregoing, we will not sustain the Examiner's rejection of claim 1 and claims 2–22 dependent therefrom. We will not sustain the rejection as it is directed to the remaining claims for the same reason.

DECISION

We do not affirm the Examiner's rejection under 35 U.S.C. § 103(a).

We do affirm the Examiner's rejection under 35 U.S.C. § 101.

TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1) (2009).

AFFIRMED